Printer's Error

Re Costs of Prostatectomy.
Statistical Bulletin Vol. 68, No.3,
page 16, July-September 1987.

Our pie is awry! Please insert this correct version of Figure A on page 16 of this issue.

The Editors

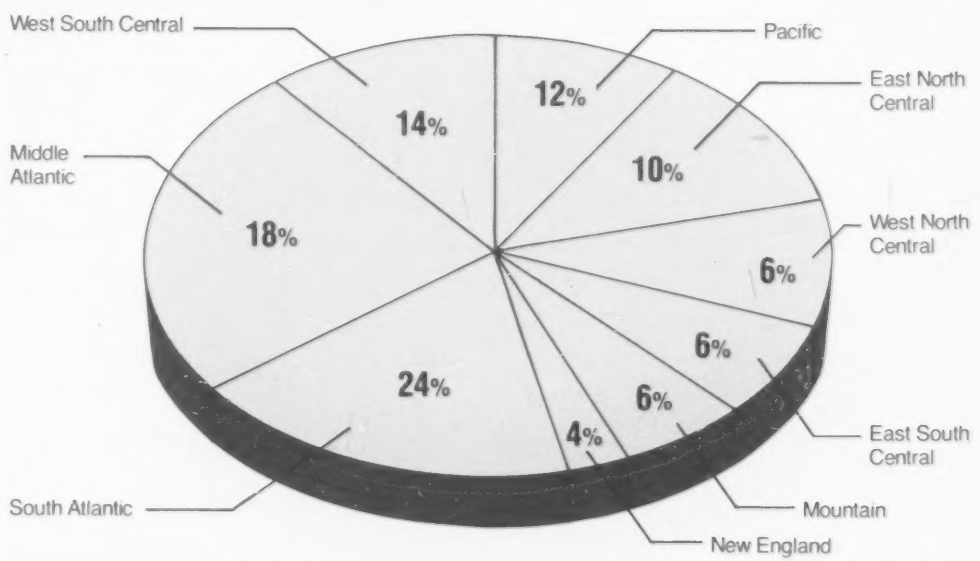
registered an age-adjusted rate of 128.7 per 10,000 Medicare enrollees, followed by the North Central area with 125.6, the South with 119.2 and the Northeast with 114.0.[1] As the surgical rates vary by geographic area, so do the charges for these procedures. Using claims data from employed persons insured under group contracts issued by Metropolitan Life, we analyzed the charges for a prostatectomy, exclusive of TURP, by geographic areas.

The study group consisted of 107 "typical" prostatectomy operations performed in the continental United States between March 1, 1985, and February 28, 1986, on men ranging in age from 42 to 64 (median age of 61 years). The charges described are average medical and surgical fees (excluding those of anesthesiologists and radiologists), and billed hospital charges for CPT-4* codes 55801-55845. Presentation of the claims data are restricted to states in which at least five prostatectomies were performed; these data are 61 percent of the reported cases in the Metropolitan Life file.

As seen in Figure A, the distribution of these operations varied by geographical

*CPT-4 — Physician's Current Procedural Terminology, Fourth Edition.

Figure A — Percent Distribution of Prostatectomy Costs by Geographic Division, United States March 1, 1985 — February 28, 1986



Source: Table 1

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Metropolitan Life
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SB
STATISTICAL BULLETIN

Vol 68 No 4 Oct – Dec 1987

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12 **Just Say No!** In this commentary, Otis R. Bowen, M.D., Secretary, U.S. Department of Health and Human Services, talks about what can be done to help avert drug and alcohol use among our nation's children.

13 **Homicide: A Current Overview.** Study analyzes this complex cause of death with its highly diverse mortality patterns.

24 **Regional Variation in Costs of Cataract Surgeries.** Recent data from Met Life's group insured show significant in-hospital cost differences for this increasingly common procedure.

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Data Contributor

Paul Verga
Art Direction

Lawrence Studio, Inc.
Graphic Design

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From The Editor's Desk

Most of us adults have been amused by those two folksy actors who advertise wine coolers on television. What we discover in this issue, which is *not* so amusing, is that 26 percent of children as young as fourth graders report that their peers drink wine coolers. This and other data represent what *SB* believes may be "a hidden side" of alcohol abuse in the United States: the extent of consumption among children and adolescents.

In a separate editorial, the editors of *SB* express concern for our society's future social welfare if this problem is to remain uncontrolled.

In a companion commentary from the federal level, Otis R. Bowen, M.D., Secretary, U.S. Department of Health and Human Services, describes help that is available for education and prevention programs. It is further evident from this federal perspective that alcohol abuse in the young is national in scope. While not alone in having an alcohol problem among its young people, perhaps the United States can be among the ranks of those nations taking effective actions against it.

Complexity of Homicide

Along with childhood alcohol abuse, homicide, unfortunately, is also a very real part of life. As *SB* analyzed this complex leading cause of death, we were reminded that though vital statistics *chronicle* homicides, *control* of homicide must involve all of society not simply "public health." Having statistically documented homicide, we humbly slip back into the ranks, hoping that someone can show us another role besides "statistician," but uncertain where to look for that direction.

Cataract Surgery

Cataract surgery has become an ever larger part of the United States' annual medical bill. In this issue *SB* examines those procedures that occurred in-hospital among Metropolitan Life group policyholders in 1985-86. Length-of-stay and charges data are quite remarkable. Do you agree?

Canadian Census

Also in this issue, the Bulletin salutes Canada, a dynamic country of people from diverse ethnic stock. With an analysis of Canada's growing population by province, the article describes numerically the centers of population and provides us with a glimpse at trends in her growth.

On that expansive note, I wish you further good reading.

The Statistical Bulletin will publish comment and criticism from readers about its contents. Alternate interpretations of data analyses or different points of view about subjects are particularly welcome. Use address at end of publisher's statement, opposite page.

Alcohol Use Among Children and Adolescents

Alcohol is by far the most widely used, accessible drug among American youth today and its popularity is growing. More than two-thirds of our 12-to-17-year-olds have used beer, wine or hard liquor in the past year, and about one-third of them are current drinkers.[1]

The news is also grim at younger ages, where 50 percent of fourth-graders do not think of alcohol as a drug. Through the older elementary years this proportion increases. Peer pressure to drink in early years may be more intense than generally understood. More than one-third of children in grade school indicate "some" to "a lot" of peer pressure to try alcohol by the fourth grade.[2] In other words, drinking alcohol is perceived to be socially important for a majority of our very young.

Alcohol use is beginning at earlier and earlier ages. National surveys indicate that the mean age for first use of alcohol is 12.3 years.[3] Smaller regional studies, however, find the average age for the first alcoholic drink to be *around 8 years*.[4] By the 12th grade, 93 percent of seniors have tried alcohol, more than 66 percent have used it within the past month and 5 percent are regular (daily or near daily) users.[5] Historically, boys have begun drinking alcohol earlier, more

A Fearsome Problem

Anthropologists have found that through child care a society successfully transmits its cultural heritage from generation to generation. Alcohol use by children, however, can warp that process. With such abuse, the risks increase for mildly brain damaged and socially handicapped children who later cannot assume mature, responsible and productive adult roles.

Few *Statistical Bulletin* reports in recent years have caused the editors such concern for the country's future as the report in this issue on childhood drinking.

After reading the article, some may conclude that *SB* expresses too much alarm. They may say that children exaggerate when asked about their drinking, or that *The Weekly Reader* survey's methodology is not valid for generalizations extended to the entire country. Yet others may counter that real alcohol abuse is usually *understated* in most surveys. We suspect that the two types of errors may be offsetting, and that whatever faults exist in the estimates reported in the article, the findings constitute a source of serious national concern, even if limited to the children responding. *SB* fears that the problem is as stated: *serious in nature and national in scope*. We hope that this article will help attract more attention to this almost invisible but fearsome problem. □

The Editors

David Johnson

Table 1 — Prevalence and Recency of Use of 10 Major Types of Drugs United States High School Seniors, 1986

	Ever Used	Past Month	Past Year Not Past Month	Not Past Year	Never Used
Marijuana Hashish	50.9	23.4	15.4	12.1	49.1
Inhalants*	15.9	2.5	3.6	9.8	84.1
Hallucinogens	9.7	2.5	3.5	3.7	90.3
Cocaine	16.9	6.2	6.5	4.2	83.1
Heroin	1.1	.2	.3	.6	98.9
Stimulants** (adjusted for inappropriate reporting)	23.4	5.5	7.9	10.0	76.6
Sedatives**	10.4	2.2	3.0	5.2	89.6
Tranquilizers**	10.9	2.1	3.7	5.1	89.1
Alcohol	91.3	65.3	19.2	6.8	8.7
Cigarettes	67.6	29.6	(38.0)†		32.4

* Data based on four questionnaire forms and represent views of approximately 12,100 seniors.
** Only those drugs not ordered by a physician.
† The combined total for the two columns is shown because the question asked did not discriminate between the two answer categories.
Source: High School Senior Survey, National Institute of Drug Abuse, 1986.

frequently and more heavily than girls, but this difference is becoming less pronounced. Reports indicate that the number of young girls who drink alcohol has been increasing faster than their male counterparts, so that now the initiation of drinking behaviors becoming increasingly similar betwee boys and girls.

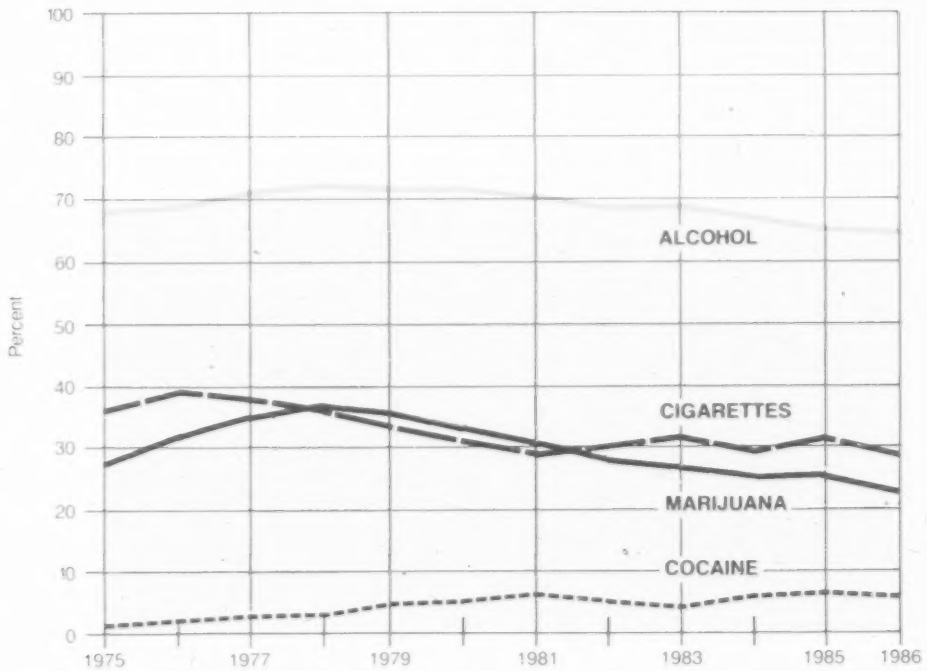
These alarming statistics have obvi medical and psychological consequen In 1985 the National Institute on Alcoh Abuse and Alcoholism estimated that a 4.6 million teenagers experienced "seri alcohol-related problems." The Nation Council on Alcoholism, Inc. reminds us alcohol is the major cause of all fatal a nonfatal teenage traffic accidents and implicated in thousands of drownings

suicides, violent injuries, homicides and burns among adolescents.[1] Alcohol abusing teenagers are more likely to be engaged in other "problem behaviors," to make lower grades in school, to be more involved in heavy marijuana use and to be less involved in religious activities than nonalcohol abusing youth.[2] In addition, early use of alcohol is considered a predictor of later alcohol abuse and a "gateway behavior" for illicit drug use and other deviant behaviors.[3]

Such startling facts led Metropolitan epidemiologists to review the most recent data on drug and alcohol use among the young, with assistance from the Office for Substance Abuse Prevention (Alcohol, Drug Abuse, and Mental Health Administration). The following report presents these data and focuses on alcohol usage (similar reports on the use of other drugs will be in forthcoming issues).

Since 1975, data on drug prevalence among United States high school seniors

Figure A — Trends in Current Use of Cocaine and the Top Three Prevalent Drugs Mentioned by High School Seniors



Source: High School Senior Survey, National Institute of Drug Abuse, 1986

have been gathered in annual surveys conducted for the National Institute on Drug Abuse by the Institute for Social Research, University of Michigan. The 1986 survey included data from close to 130 high schools and involved more than 15,000 seniors. In addition to these data, in 1983 and 1987, "The Weekly Reader," produced by Field Publications, conducted a national survey of elementary and high school students' attitudes and perceptions of drugs and alcohol use. These data represent the perceptions and beliefs of a sample of approximately 500,000 school children across the country. The following report is bas selected portions of these national dat in the interest of alerting our readers to magnitude of the problem and the fac alcohol continues to be the No. 1 drug problem among America's youth.

*These previously unpublished data from the 1986 H School Senior Survey were supplied courtesy of Dr. J Johnston through the Office for Substance Abuse Pre within the Alcohol, Drug Abuse, and Mental He Administration. "The Weekly Reader" data were tur *through the National Council on Alcoholism, Inc. Th of Substance Abuse Prevention, facilitated the acqui of these data.

Table 2—Alcohol Usage Patterns United States High School Seniors, 1986

	Lifetime Use	Annual Use	Last Month	Daily in Last Month
All Seniors	**91.3**	84.5	65.3	4.8
Sex				
Male	**92.3**	85.8	69.0	6.7
Female	**90.6**	83.4	61.9	2.8
College Plans				
None or under 4 years	**92.2**	85.1	66.6	6.8
Complete 4 Years	**91.1**	84.6	64.8	3.5
Region				
Northeast	**94.3**	88.7	67.6	4.9
Midwest	**93.5**	88.4	71.3	4.9
South	**88.0**	78.4	58.2	4.9
West	**89.7**	82.9	64.5	4.2
Population Density				
Large SMSA	**92.8**	86.8	66.2	4.0
Other SMSA	**91.0**	84.1	64.8	4.5
Non-SMSA	**90.6**	83.0	65.2	5.8

Source: High School Senior Survey, National Institute of Drug Abuse, 1986; extrapolations by Metropolitan Life Insurance Company Health and Safety Education personnel, 1987.

Table 3—Trends in Alcohol Behaviors and Perceptions Among High School Seniors, United States, 1975 to 1986

	Percent Saying 'Great Risk' If				Percent Saying 'Most or All' of Best Friends	
	Try 1 or 2 Alcoholic Drinks	Take 1 or 2 Drinks Nearly Every Day	Take 4 or 5 Drinks Nearly Every Day	Take 5 or More Drinks Once, Twice Weekend	Drink Alcohol	Get Drunk At Least Once a Week
1975	5.3	21.5	63.5	37.8	68.4	30.1
1976	4.8	21.2	61.0	37.0	64.7	26.6
1977	4.1	18.5	62.9	34.7	66.2	27.6
1978	3.4	19.6	63.1	34.5	68.9	30.2
1979	4.1	22.6	66.2	34.9	68.5	32.0
1980	3.8	20.3	65.7	35.9	68.9	30.1
1981	4.6	21.6	64.5	36.3	67.7	29.4
1982	3.5	21.6	65.5	36.0	69.7	29.9
1983	4.2	21.6	66.8	38.6	69.0	31.0
1984	4.6	23.0	68.4	41.7	66.6	29.6
1985	5.0	24.4	69.8	43.0	66.0	29.9
1986	4.6	25.1	66.5	39.1	68.0	31.8

Source: High School Senior Survey, National Institute of Drug Abuse. 1986 extrapolations by Metropolitan Life Insurance Company Health and Safety Education personnel, 1987

Prevalence of Use

As seen in Table 1, alcohol was the drug most commonly used by seniors in the class of 1986. Nine out of 10 seniors had consumed alcohol during their lifetime, its use was reported 35 percent more frequently than cigarette smoking and 79 percent more often than marijuana or hashish use (the two next most prevalent drugs mentioned). About two-thirds of the seniors had consumed wine, beer or distilled spirits within the last 30 days and only one in 12 had *never* used alcohol. Lifetime use of cocaine—a drug that has received widespread media attention—was reported by approximately one in six seniors, with 6 percent acknowledging use within the last month.

Usage rates for cocaine and the top three drugs (alcohol, cigarettes and marijuana) have fluctuated somewhat between 1975 and 1986, but the percent of seniors using these drugs within the last 30 days seems to be declining (Figure A). From a public health

perspective, current alcohol prevalence remains unacceptably high even with a 4 percent decrease in rate of use over the 12 years. Cigarette smoking, however, decreased almost 20 percent over the period and marijuana/hashish usage was down by 14 percent. Cocaine use increased more than three times over the 12 years but showed a 7 percent decline between 1985 and 1986. Remarkably high rates of ever (lifetime), annual, and current alcohol use were reported by seniors in all four geographic areas of the country (Table 2). The highest rates were in the Northeast and Midwest regions (94 percent each for lifetime usage), and these areas retained the highest rates across the various frequency categories. Seven out of 10 high school seniors in the Midwest drank alcohol within the last month compared with two-thirds of those in the Northeast. Seniors in the South reported the lowest rates for all but daily use, where their rates were the same as those in the Northeast and Midwest.

Similar proportions of senior girls and boys reported a history of lifetime and/or annual use of alcohol. More boys than girls used alcohol within the last month (69 vs. 62 percent), and daily use among senior boys was almost two and one-half times more prevalent than among the girls. Similar rates existed in reference to college plans with the most revealing data evident for daily use. That is, daily alcohol consumption was half as prevalent among seniors with plans to complete at least four years of college than among those with lower academic expectations.

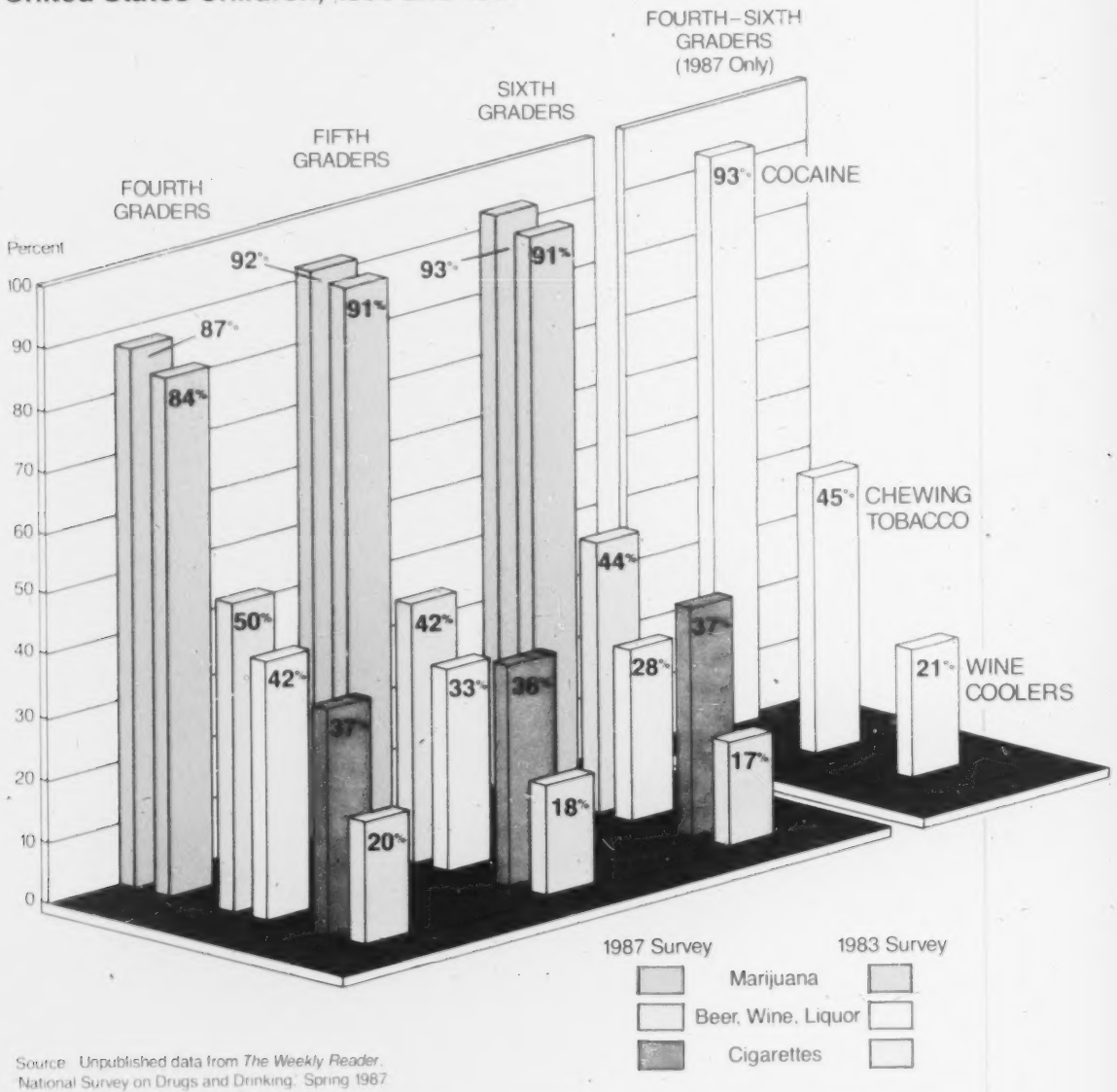
As disturbing as those prevalence rates are, unfortunately only four out of 10 seniors indicated that they believed weekend heavy drinkers were at "great risk" of harming themselves (Table 3). This proportion represents a significant 9 percent *decrease* in such a perception between 1985 and 1986. Perceived harmfulness of various alcohol consumption patterns has remained fairly stable among seniors since 1975. Roughly two-thirds feel persons are at "great risk" if they daily drink four or five alcoholic beverages and one-quarter feel this way about one or two drinks nearly every day. Consistent with those findings, more than two-thirds of high school seniors indicate that most or all of their friends drink alcohol and close to one-third get drunk at least once a week.

Beliefs and Perceptions Held by Elementary School Children

Nearly nine out of 10 fourth-to-sixth graders are aware that marijuana and cocaine are drugs; less than half consider alcohol a drug, and even fewer think of cigarettes this way (Figure B). Of particular interest is the fact that only 21 percent of these students think of wine coolers as a drug. Knowledge that alcoholic beverages are drugs increased between 1983 and 1987 while peer pressure to try them remained fairly stable over the years (Figure B).

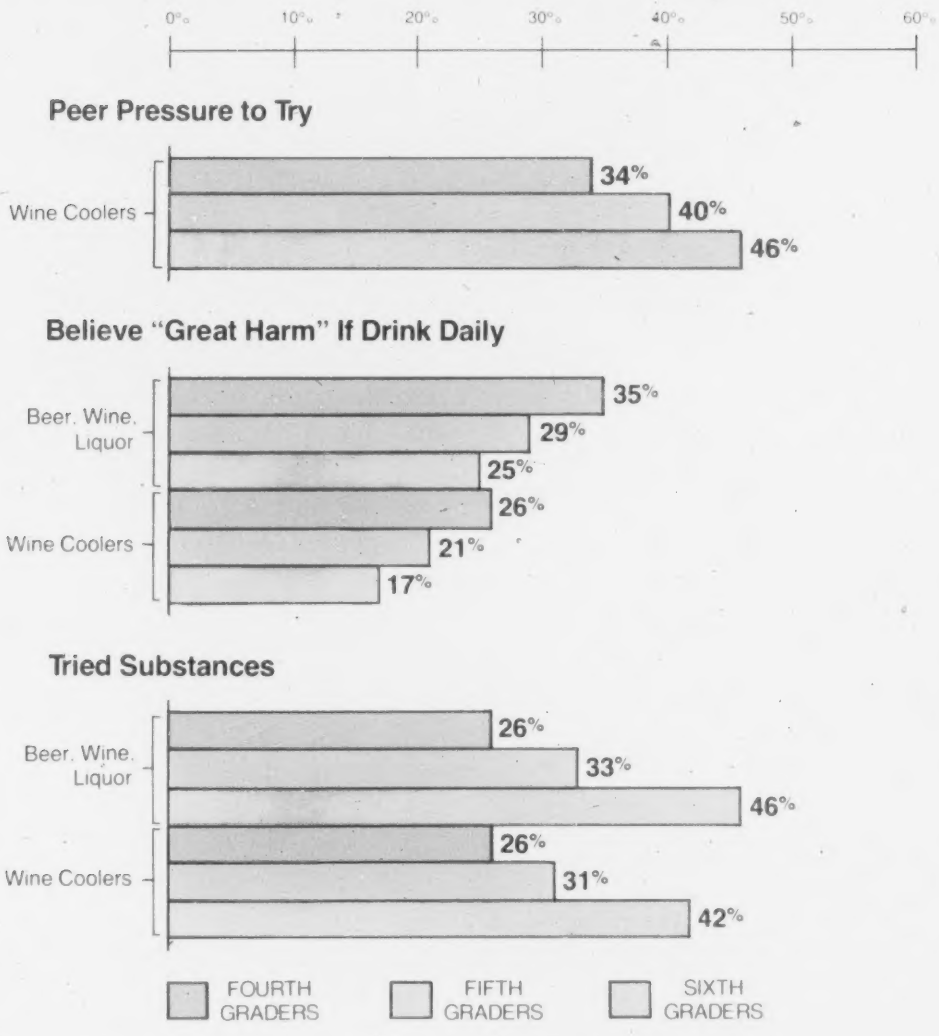
Children's perceptions about use of alcoholic beverages indicate a climate of acceptability and normative behavior that has serious implications for future problems. For instance, one-third of fourth graders, almost one-half of sixth graders and two-thirds of 7-12 graders report "some" or "a lot" of peer pressure to drink wine coolers, a product widely advertised since 1983. Even more troubling for the public's long-term health is that the proportion of elementary school children who believe that the daily use of alcohol or wine coolers by their contemporaries could cause "great harm" decreased with each succeeding grade. By the sixth grade, the proportion of children

Figure B — Trends in Beliefs That The Substance Is a Drug United States Children, 1983 and 1987



Source: Unpublished data from *The Weekly Reader*, National Survey on Drugs and Drinking, Spring 1987

Figure C—Fourth Through Sixth Graders' Beliefs About Alcohol and Wine Coolers, United States, 1987



Source: Unpublished data from *The Weekly Reader* National Survey on Drugs and Drinking, Spring 1987

who thought daily use of alcohol was very harmful decreased 29 percent and those who thought this about wine coolers decreased by 35 percent.

Across the country, the proportion of children who report that fellow students have tried alcohol or wine coolers increases with each grade level (Figure C). Among fourth graders, 26 percent think their peers have tried these drinks. This proportion rises to 46 percent for alcohol and 42 percent for wine coolers by the sixth grade and continues to climb to about 80 percent among 7th-to-12th graders who believe their fellow students have tried these alcoholic beverages.

Childhood and adolescent drinking and drug abuse have become major public health problems in the United States as the analyses in this article amply attest. As a nation accountable for its children's behavior and their future, findings such as these raise exceedingly uncomfortable questions for adults. Where have we been as these chemical abuse problems emerged? Why is the use of alcohol and/or other drugs so pervasive among America's youth? Further, why has adult society in the United States permitted children and teens ready access to alcoholic beverages such as wine coolers? And, the most important question of all: What are we doing to control or reverse this problem?

The pathway to less childhood drinking must start with education. Public education campaigns and community-based preventive measures are essential to any long-term solution. To support such actions, a federal Office of Substance Abuse Prevention (OSAP) was created as part of the 1986 Anti-Drug Abuse Act. Over the next two years, OSAP will spend $20 million on demonstration programs at the community level for prevention, treatment and rehabilitation projects for high-risk youth. Another $4 million will be spent on programs to reach teens and preteens who are beginning to experiment with the three major "gateway" drugs: alcohol, tobacco and marijuana. For more information contact the Office of Substance Abuse Prevention, (301) 443-0373.

At this time, the magnitude of the problem is just starting to be apparent. These data and their analyses are intended to increase public understanding of the problem's gravity. If we are to develop effective solutions, the intensity of a national effort must equal the challenge. The time to start is now. □

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Commentary

Just Say No!

Why do kids drink? To fit in with the crowd, to feel grown up, to cope, to exercise independence—the list goes on.

The statistics, compiled from data provided by the Department of Health and Human Services and the Xerox Corporation, are indeed alarming, but the consequences are even more devastating! Use of alcohol and other drugs by youth is clearly linked to juvenile delinquency, truancy, unwanted pregnancies, poor academic performance, traffic-related fatalities, homicides, suicides, and other problems. Young people jeopardize their health, social development, and future by using alcohol and other drugs.

The real question is, how can we stop such behaviors? Experts admit that there's no easy answer to preventing the use of alcohol and other drugs by youth, but they identify several "protective" factors that can help.

- We need to have clear "non-use" messages given by families, communities, peers, and the media.
- We need to start targeted prevention programs at early ages.
- We need to establish community-based teams to implement comprehensive and well-coordinated prevention strategies.
- We need to foster the development of parent groups and to educate parents and other adults about the warning signs of substance use by youth, the effects of their own alcohol use on children's behavior, and available resources for help.
- We should build social skills among youth and promote relationships with non-using peers.
- We should continue to work in every community to reduce the availability of alcohol to youth.

And, finally, we must empower young people to ask for help when confronted with peer or societal pressures to drink, dating or social problems, seemingly insurmountable challenges, or the onset of substance use.

Fortunately such factors have been incorporated into the new "Be Smart! Don't Start!—Just Say No!" prevention campaign, sponsored by the Office for Substance Abuse Prevention, U.S. Department of Health and Human Services. This campaign is a nationwide effort aimed at helping 8 to 12-year olds "say no" to alcohol. Creative products were developed by the Children's Television Workshop under contract to Macro Systems, and include a music video and public service announcements featuring The Jets rock group. Materials for children, parents, and teachers are also included. The campaign is supported by more than 30 national civic, social, professional and voluntary groups.

This campaign deserves the support of us all—preteens, teens, educators, youth and parent organizations, civic and service groups, religious organizations, health care providers, political leaders, and businesses alike. It takes more than individuals and organizations to solve the alcohol and drug crisis. It will take each community, one by one, to adopt a full-scale prevention approach. Each community must help its children to "Just Say No!" to alcohol and other drugs. One drug-free community plus another drug-free community, and so on, equals a drug-free society. Be smart! Do your part! Our kids' lives depend on it.

Otis R. Bowen, M.D.
Secretary
U.S. Department of Health and Human Services

Homicide: A Current Overview

In the field of demography few causes of death produce as many diverse mortality patterns as homicide. Analyses of differentials by age, race, sex or geographic area all reveal significant variations. In general, mortality rates were three times higher for men than for women, five times larger for nonwhites than for whites, and differed by as much as 15-fold geographically. Because of this variability and its societal implications, researchers have conducted numerous studies to try to elucidate the factors precipitating the slayings.

Nearly 21,000 American deaths resulted from homicide or legal intervention in 1986. This compares with a provisional total of 19,420 cases in 1985 and a final count of 19,796 in 1984. When compared with the number of deaths for all causes, the toll from homicide and legal intervention was relatively small — just one percent. Nonetheless, it still is the 12th leading cause of death in the country. Among persons aged 15-44, however, mortality from homicide has a significant impact.

Nearly three-fourths of all homicides occur in this age grouping and, moreover, they account for almost 10 percent of the total deaths at these ages. Homicide (when combined with suicide) was estimated by the Centers for Disease Control to be ranked as the fourth leading cause of years of potential life lost before age 65 in the United States in 1985.

Men are the most frequent victims of homicide. Although their proportion has declined

Table 1 — Trend in Age-Adjusted Mortality Rates From Homicide and Legal Intervention, by Race and Sex United States, 1980 to 1984

Death Rate per 100,000

Year	Total			White			All Other		
	Both Sexes	Men	Women	Both Sexes	Men	Women	Both Sexes	Men	Women
1984	8.4	**13.0**	3.9	5.5	**8.2**	2.9	24.9	**42.2**	9.6
1983	8.6	**13.6**	3.8	5.6	**8.4**	2.8	26.4	**45.2**	9.8
1982	9.7	**15.3**	4.2	6.3	**9.5**	3.1	30.0	**52.2**	10.5
1981	10.4	**16.7**	4.3	6.6	**10.3**	3.1	33.3	**58.5**	11.4
1980	10.8	**17.4**	4.5	6.9	**10.9**	3.2	35.0	**61.3**	12.2

Source: Various reports by the National Center for Health Statistics.

Table 2—Trend in Mortality From Homicide and Legal Intervention Population Aged 15–44, by Race and Sex, United States, 1980 to 1984

Year	Men				Women			
	15-44*	15-24	25-34	35-44	15-44*	15-24	25-34	35-44
				Total Population				
1984	**19.9**	18.1	23.5	18.2	**5.5**	5.8	5.9	4.7
1983	**21.1**	19.2	24.8	19.2	**5.5**	5.4	6.2	4.8
1982	**23.6**	21.2	28.3	21.4	**6.0**	6.0	6.4	5.4
1981	**25.8**	23.0	30.5	24.0	**6.0**	6.2	6.6	5.2
1980	**27.3**	24.5	32.5	24.9	**6.5**	6.6	7.0	5.7
				White				
1984	**12.3**	11.1	14.1	11.8	**3.9**	4.3	3.9	3.4
1983	**12.9**	11.5	14.9	12.4	**3.8**	3.7	4.1	3.5
1982	**14.4**	13.1	16.2	13.9	**4.3**	4.4	4.3	4.0
1981	**15.7**	14.4	17.6	15.1	**4.1**	4.3	4.3	3.6
1980	**16.6**	15.5	18.9	15.5	**4.4**	4.7	4.3	4.1
				All Other				
1984	**64.2**	52.7	78.4	62.8	**14.0**	13.1	16.4	12.4
1983	**68.9**	57.4	84.2	66.2	**14.6**	14.0	17.2	12.5
1982	**79.0**	63.0	101.2	74.0	**15.1**	13.6	17.9	13.7
1981	**88.6**	68.5	112.9	86.6	**16.6**	15.5	19.6	14.4
1980	**94.7**	74.5	120.9	90.6	**18.2**	16.6	22.1	15.7

* Adjusted on basis of age distribution of the United States total population, 1940
Source: Various reports by the National Center for Health Statistics

Although their proportion has declined somewhat in recent years, men still account for more than three-fourths of the homicide victims.

somewhat in recent years, men still account for more than three-fourths of the deceased. As may be ascertained from Table 1, the age-adjusted death rate among men—13.0 per 100,000—is over three times that for women.

For both sexes combined, the age-adjusted death rate declined to 8.1 per 100,000 in 1985 from 8.4 per 100,000 in 1984 and from an all-time high of 10.8 per 100,000 in 1980. At that time a record 24,278 persons lost their lives from homicide or legal intervention.

Nonwhite Versus White Rates

In the United States homicide plays a much more significant role in the mortality of nonwhites than of whites. In 1984 (latest data available) the age-adjusted death rate for nonwhites was roughly five times the mortality rate of whites. Analysis by sex reveals that the

Table 3—Mortality From Homicide and Legal Intervention Among Men Aged 15–44, United States, 1979–81

* Death Rate per 100,000

	Total				White				All Other			
	15-44*	15-24	25-34	35-44	15-44*	15-24	25-34	35-44	15-44*	15-24	25-34	35-44
UNITED STATES	**26.2**	**23.3**	**31.2**	**24.2**	**16.4**	**15.4**	**18.6**	**15.3**	**74.2**	**56.7**	**93.8**	**74.4**
New England	9.6	8.1	11.7	9.2	7.4	6.3	8.6	7.5	40.8	30.1	57.1	36.0
Maine	3.8	†	†	†	3.6	†	†	†	†	†	†	†
New Hampshire	4.5	†	†	†	4.6	†	†	†	†	†	†	†
Vermont	†	†	†	†	†	†	†	†	†	†	†	†
Massachusetts	10.2	8.7	12.7	9.4	8.1	6.9	9.4	8.0	38.8	30.8	55.1	†
Rhode Island	10.9	9.7	15.2	†	10.8	9.6	15.2	†	†	†	†	†
Connecticut	12.7	10.7	14.4	13.2	8.2	7.5	8.1	9.4	51.5	35.0	71.7	49.8
Middle Atlantic	26.1	24.2	31.9	21.9	14.6	13.3	17.4	13.1	82.2	74.2	105.4	65.6
New York	35.2	33.6	41.5	30.0	22.1	20.3	25.9	20.0	83.4	80.3	101.1	66.8
New Jersey	18.1	15.6	23.7	14.7	9.7	8.3	11.9	9.1	57.6	47.3	82.3	42.1
Pennsylvania	17.5	15.7	22.5	14.0	7.5	7.2	9.1	6.2	105.7	83.9	143.1	90.8
East North Central	22.8	21.1	27.4	19.6	10.8	11.1	11.8	9.3	102.6	81.6	132.1	95.8
Ohio	18.1	16.3	21.1	17.0	9.5	9.6	9.4	9.5	90.7	66.5	120.6	87.5
Indiana	18.2	16.2	22.9	15.5	10.2	9.5	11.0	10.2	103.6	78.4	149.8	82.7
Illinois	34.0	34.7	40.4	25.7	17.0	19.2	18.8	11.9	105.2	92.7	132.8	89.4
Michigan	25.0	20.8	30.8	23.7	9.1	8.8	10.4	7.9	120.3	88.1	148.8	129.1
Wisconsin	6.9	5.7	8.6	6.4	4.7	4.0	5.4	4.8	42.6	31.1	59.5	†
West North Central	15.0	14.2	17.9	12.5	7.2	6.3	8.7	6.7	119.5	104.9	146.6	107.0
Minnesota	5.1	4.2	6.4	4.6	3.8	3.6	4.2	3.5	38.3	†	59.6	†
Iowa	5.9	5.0	6.3	6.7	4.8	4.1	4.7	5.7	44.8	†	†	†
Missouri	32.5	31.1	39.7	25.8	12.2	10.0	15.2	11.7	187.5	168.7	237.2	154.0
North Dakota	†	†	†	†	†	†	†	†	†	†	†	†
South Dakota	9.7	10.7	†	†	†	†	†	†	106.9	†	†	†
Nebraska	9.5	9.8	11.5	†	5.6	6.4	6.2	†	79.4	†	106.3	†
Kansas	16.5	16.3	19.3	13.5	11.3	10.1	14.3	9.3	67.1	62.9	69.9	†
South Atlantic	30.3	22.6	37.0	32.6	17.2	13.8	19.2	19.2	77.7	48.3	100.5	89.6
Delaware	13.1	12.7	14.4	†	8.8	†	†	†	34.6	†	†	†
Maryland	25.6	23.6	32.2	20.6	9.5	8.8	11.8	7.8	72.7	63.0	93.2	61.6
District of Columbia	74.7	63.6	89.6	71.9	†	†	†	†	103.7	81.5	130.1	102.0
Virginia	19.3	14.6	22.8	21.3	11.9	10.3	12.2	13.8	50.0	29.0	66.4	58.2
West Virginia	17.9	15.0	20.8	18.2	15.8	13.9	17.7	16.0	77.4	†	†	†
North Carolina	26.5	17.4	33.0	30.7	15.5	11.8	17.2	18.2	65.5	32.1	86.4	84.9
South Carolina	28.3	17.5	35.0	34.6	15.2	11.3	17.0	18.1	63.2	30.0	79.7	87.4
Georgia	35.6	24.1	43.7	41.1	17.8	12.7	20.5	21.3	88.7	49.9	110.1	114.6
Florida	40.6	31.6	48.5	43.0	26.4	21.3	29.6	29.4	109.0	73.1	142.3	116.9
East South Central	30.3	21.8	38.8	31.4	16.9	11.9	21.3	18.3	93.3	55.2	120.0	111.8
Kentucky	22.4	16.7	28.6	22.5	18.5	14.2	23.4	18.5	72.2	38.6	95.7	88.9
Tennessee	27.7	22.2	33.6	28.1	16.5	12.6	20.3	17.1	92.6	63.7	107.8	112.6
Alabama	36.2	23.7	48.8	37.9	16.2	10.9	20.4	18.1	105.3	55.5	143.0	126.4
Mississippi	38.1	25.7	49.3	41.2	15.9	7.3	20.8	21.3	87.6	54.2	113.2	101.4
West South Central	41.0	35.4	49.2	38.6	29.7	27.6	34.4	26.8	84.7	59.0	105.7	93.6
Arkansas	25.4	20.5	33.7	22.1	13.9	11.0	17.2	14.0	90.2	58.7	127.5	87.9
Louisiana	45.3	37.8	55.4	43.3	17.5	16.6	19.6	16.3	119.2	81.7	153.1	128.6
Oklahoma	25.0	18.5	31.3	26.3	18.9	13.5	23.2	21.1	62.4	41.6	81.8	66.9
Texas	45.2	40.3	53.1	42.3	37.6	36.3	43.1	32.9	74.5	52.7	90.2	84.9
Mountain	18.4	16.7	20.1	18.6	16.7	15.3	18.2	16.9	29.6	24.2	32.9	32.7
Montana	12.4	11.0	13.8	†	9.0	†	†	†	65.6	†	†	†
Idaho	10.1	9.1	10.1	†	10.5	9.4	10.7	†	†	†	†	†
Wyoming	14.0	†	18.4	†	12.8	†	15.6	†	†	†	†	†
Colorado	13.6	12.6	15.5	12.8	12.5	12.1	13.2	12.3	22.4	†	34.4	†
New Mexico	36.7	31.1	42.2	37.5	40.8	35.9	47.2	39.8	25.0	19.5	27.7	†
Arizona	21.9	21.9	21.6	22.4	20.1	20.0	20.9	19.2	30.8	28.9	24.6	40.0
Utah	8.3	8.5	8.4	†	8.0	7.7	8.7	†	†	†	†	†
Nevada	30.6	25.3	37.5	29.4	25.2	20.5	30.7	24.8	66.8	†	83.7	†
Pacific	28.4	30.4	30.8	22.9	25.1	28.5	26.1	19.4	39.7	36.0	46.7	36.4
Washington	11.4	9.2	13.4	12.0	9.2	8.3	10.1	9.5	33.4	16.0	45.4	42.2
Oregon	10.1	10.3	10.9	8.9	9.2	9.6	9.9	7.8	24.8	†	†	†
California	34.1	37.1	37.1	26.6	31.1	36.0	32.4	23.1	43.4	40.1	50.9	38.8
Alaska	19.6	19.7	22.8	†	13.7	†	†	†	41.7	†	†	†
Hawaii	13.6	12.4	10.9	18.3	16.2	†	†	†	12.0	12.0	†	†

* Adjusted on basis of age distribution of the United States total population, 1940.

† Fewer than 20 deaths; rate not shown.

Source: Computed by the Health and Safety Education Division of the Metropolitan Life Insurance Company, based on data from the Division of Vital Statistics, National Center for Health Statistics.

Table 4 — Mortality From Homicide and Legal Intervention Among Women Aged 15–44, United States, 1979–81

Death Rate per 100,000

	Total				White				All Other			
	15-44*	15-24	25-34	35-44	15-44*	15-24	25-34	35-44	15-44*	15-24	25-34	35-44
UNITED STATES	6.2	6.3	6.7	5.4	4.3	4.6	4.4	3.9	14.6	13.4	17.3	13.1
New England	2.9	3.9	2.5	2.1	2.4	3.2	1.8	1.9	9.7	11.6	12.2	4.2
Maine	3.9	†	†	†	3.6	†	†	†	†	†	†	†
New Hampshire	†	†	†	†	†	†	†	†	†	†	†	†
Vermont	†	†	†	†	†	†	†	†	†	†	†	†
Massachusetts	2.6	3.8	2.3	†	2.2	3.3	1.6	†	8.7	†	†	†
Rhode Island	3.9	†	†	†	3.4	†	†	†	†	†	†	†
Connecticut	3.2	3.7	2.9	†	2.2	†	†	†	10.3	†	†	†
Middle Atlantic	4.8	5.3	5.4	3.6	3.1	3.6	3.3	2.3	12.3	12.4	14.6	9.3
New York	5.6	6.4	6.2	4.0	3.9	4.7	4.2	2.4	11.3	11.6	12.9	8.9
New Jersey	4.4	4.9	4.5	3.7	2.8	3.3	2.5	2.5	11.0	11.2	12.5	8.9
Pennsylvania	3.9	3.9	4.8	3.0	2.3	2.2	2.6	2.0	16.8	16.2	22.4	11.2
East North Central	5.6	5.9	6.2	4.6	3.3	3.9	3.2	2.8	19.4	17.7	23.5	16.9
Ohio	4.9	5.0	5.2	4.4	3.4	3.6	3.6	3.0	16.0	14.8	17.3	16.1
Indiana	4.4	4.8	5.0	3.1	3.1	3.4	3.3	2.4	16.4	17.2	20.8	†
Illinois	6.7	7.3	6.6	6.0	3.6	4.5	3.0	3.2	18.2	17.1	20.2	17.4
Michigan	7.1	6.9	8.8	5.3	3.7	4.2	3.6	3.0	25.3	21.5	34.9	19.1
Wisconsin	3.2	4.0	3.3	†	2.2	3.1	2.1	†	18.2	†	†	†
West North Central	3.8	4.6	3.9	2.8	2.6	3.1	2.6	2.1	18.9	22.5	20.5	12.5
Minnesota	2.1	2.8	†	†	1.8	2.4	†	†	†	†	†	†
Iowa	2.2	3.5	†	†	2.1	3.3	†	†	†	†	†	†
Missouri	6.6	8.3	6.3	4.7	4.0	4.5	3.8	3.5	23.9	32.2	23.4	†
North Dakota	†	†	†	†	†	†	†	†	†	†	†	†
South Dakota	†	†	†	†	†	†	†	†	†	†	†	†
Nebraska	2.7	†	†	†	2.2	†	†	†	†	†	†	†
Kansas	4.6	4.1	6.1	†	3.6	3.9	4.2	†	15.4	†	†	†
South Atlantic	8.0	7.6	8.8	7.7	5.2	5.1	5.3	5.3	16.8	14.1	19.9	16.7
Delaware	6.5	†	†	†	5.8	†	†	†	†	†	†	†
Maryland	6.0	6.9	6.2	4.6	3.4	3.9	3.3	†	12.7	14.1	13.4	10.0
District of Columbia	14.1	12.0	12.9	18.1	†	†	†	†	18.0	14.5	17.0	23.6
Virginia	6.1	5.5	7.5	5.4	4.7	4.3	5.6	4.2	11.5	9.3	14.7	10.7
West Virginia	4.8	3.8	5.0	†	4.0	†	4.5	†	†	†	†	†
North Carolina	6.5	5.5	7.4	6.9	4.2	4.0	4.4	4.3	13.7	9.0	16.4	16.6
South Carolina	7.1	6.5	7.4	7.5	4.8	5.1	4.1	5.1	12.3	8.9	14.7	13.9
Georgia	10.1	8.4	11.9	10.3	5.2	4.3	5.8	5.7	22.5	17.0	27.0	24.4
Florida	10.7	11.2	10.9	9.7	7.5	8.1	6.7	7.8	24.0	22.8	29.4	19.4
East South Central	7.3	6.1	8.4	7.7	4.8	4.2	5.2	5.2	17.7	12.2	21.7	20.1
Kentucky	5.6	5.3	7.3	3.9	4.9	5.0	6.0	3.5	13.6	†	†	†
Tennessee	7.0	5.6	7.9	7.8	4.9	3.8	5.0	6.2	17.4	12.8	22.3	17.5
Alabama	8.8	7.3	9.1	10.3	5.2	4.4	5.1	6.3	19.2	13.6	20.4	25.0
Mississippi	8.4	6.5	10.1	8.9	3.6	†	†	†	17.5	11.3	22.2	20.2
West South Central	8.6	8.6	9.1	8.0	6.4	6.7	6.4	6.1	16.4	14.5	18.8	16.1
Arkansas	7.4	7.3	7.0	7.9	5.3	4.8	5.1	6.1	17.5	16.9	†	†
Louisiana	9.2	8.8	10.3	8.6	4.5	4.2	4.3	5.0	19.7	17.6	23.8	17.8
Oklahoma	7.3	7.2	9.1	5.4	6.3	6.7	7.3	4.6	13.5	†	20.1	†
Texas	8.9	9.0	9.1	8.4	7.1	7.6	6.9	6.7	15.2	13.5	16.9	15.6
Mountain	6.2	5.7	6.7	6.1	5.6	5.1	6.2	5.7	9.3	9.1	9.6	9.3
Montana	5.4	†	†	†	4.4	†	†	†	†	†	†	†
Idaho	3.5	†	†	†	3.5	†	†	†	†	†	†	†
Wyoming	†	†	†	†	†	†	†	†	†	†	†	†
Colorado	5.8	5.5	5.8	6.2	5.0	4.8	5.1	5.1	12.5	†	†	†
New Mexico	8.0	7.3	9.8	†	9.3	8.2	12.0	†	†	†	†	†
Arizona	6.7	5.2	7.1	8.2	6.6	4.8	7.2	8.1	7.3	†	†	†
Utah	2.7	†	†	†	2.5	†	†	†	†	†	†	†
Nevada	13.5	16.6	14.9	†	12.1	15.2	11.9	†	†	†	†	†
Pacific	6.6	7.2	7.0	5.3	5.8	6.5	5.8	4.8	9.2	9.3	11.0	7.2
Washington	4.6	4.8	5.7	3.2	4.0	4.1	4.6	3.0	11.7	†	†	†
Oregon	3.9	4.0	4.3	†	3.6	3.9	3.8	†	†	†	†	†
California	7.2	8.0	7.6	5.7	6.5	7.5	6.5	5.3	9.2	9.4	11.1	6.9
Alaska	11.0	†	†	†	†	†	†	†	†	†	†	†
Hawaii	5.1	†	†	†	†	†	†	†	5.4	†	†	†

* Adjusted on basis of age distribution of the United States total population, 1940.

† Fewer than 20 deaths; rate not shown.

Source: Computed by the Health and Safety Education Division of the Metropolitan Life Insurance Company based on data from the Division of Vital Statistics, National Center for Health Statistics.

nonwhite-to-white ratio of death rates was 5 to 1 among men and about 3½ to 1 among women. It is noteworthy that during the past few years the mortality disparities have narrowed somewhat.

There has been a significant reduction homicide rates among persons aged 15-44. The improvement has been especially significant for men: for example, between 1980 and 1984 the age-adjusted death rate declined by about 26 percent for whites and 32 percent for men of all other races. Among nonwhite women the relative decline was slightly less than that for nonwhite men, whereas the decrease for white women was only half as large as for white men. The recent trend in age-specific mortality rates from homicide and legal intervention is presented by race and sex for the population aged 15-44 in Table 2. As may be seen among the three age groupings analyzed, the death rates at ages 25-34 tend to be somewhat higher than the rates for the younger or older age categories. The disparity is not as marked among white men as it is among men of all other races. The right-hand side of the Table contains the analysis showing that the variations in age-specific death rates among women are not nearly as pronounced.

Method Used

Not surprisingly, firearms are by far the most frequent means used to commit homicide. Virtually three-fifths of all fatalities from homicide and legal intervention were caused by shootings. The next most common cause of mortality was by cutting and piercing instruments—they accounted for one-fifth of the homicides. Men were more likely to die from firearms than women—the proportions were three-fifths for men and less than one-half for women. Analysis shows that for both men and women there were no significant differences by race in the proportion of homicides due to firearms.

Marked Geographic Variations

The marked national differences in mortality rates from homicide and legal intervention between men and women are also present when analyzed geographically. The results of a study prepared by Metropolitan Life statisticians, based on the 1980 Census of Population and deaths among persons aged 15-44 that occurred during the three-year period 1979-1981, are presented in Tables 3 and 4.* In this article, the deaths are those assigned to the International Classification of Diseases, Ninth Revision, Codes E960-E978. The mortality rates are shown for three separate 10-year age groupings from ages 15-24 to ages 35-44. The death rates for ages 15-44 combined have been adjusted to take into account the differences in the age composition of state populations.

Among men aged 15-44, the age-adjusted mortality rate from homicide and legal intervention in the United States during 1979-81 was 26.2 per 100,000. A glance at Table 3 reveals significant geographic disparities. The death rate was 9.6 per 100,000 in the New England states, but was more than four times as large—41.0 per 100,000—in the West South Central states. Death rates slightly

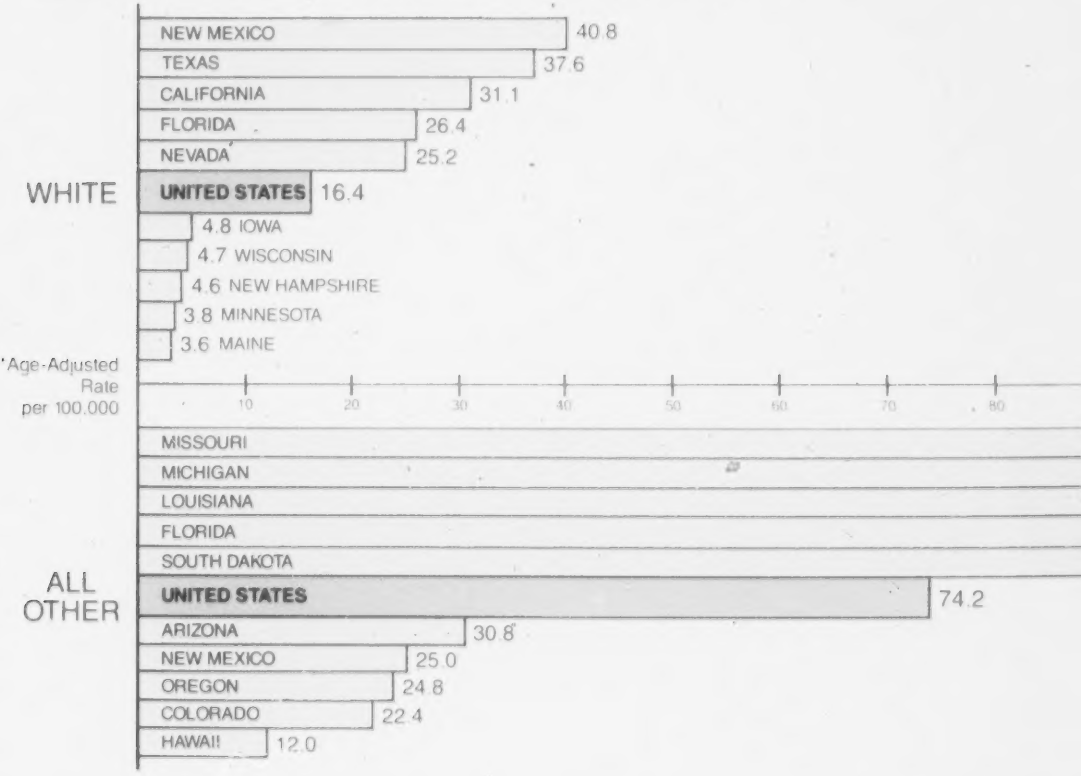
*This is the most recent detailed analysis of regional variations in causes of death which became available.

higher than the national average occurred in the South Atlantic, East South Central and Pacific divisions of the country. On the other hand, the age-adjusted mortality rates in the West North Central and Mountain states were significantly below the United States figure.

Comparisons Among States

Mortality variations among individual states are also extremely pronounced. In eight states the death rates from homicide and

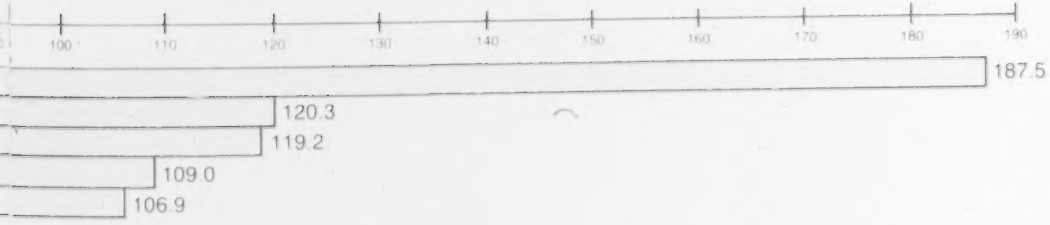
Figure A—States With Highest and Lowest Mortality From Homicide Among Men Aged 15–44, by Race, United States, 1979–81



legal intervention were less than 10.0 per 100,000. The lowest value was recorded in Maine, closely followed by that in New Hampshire. By contrast, relatively large death rates—above 40.0 per 100,000—were experienced in Louisiana, Texas and Florida. However, the age-adjusted death rate in these states did not even approach the magnitude of the value in the District of Columbia—namely, 74.7 per 100,000.

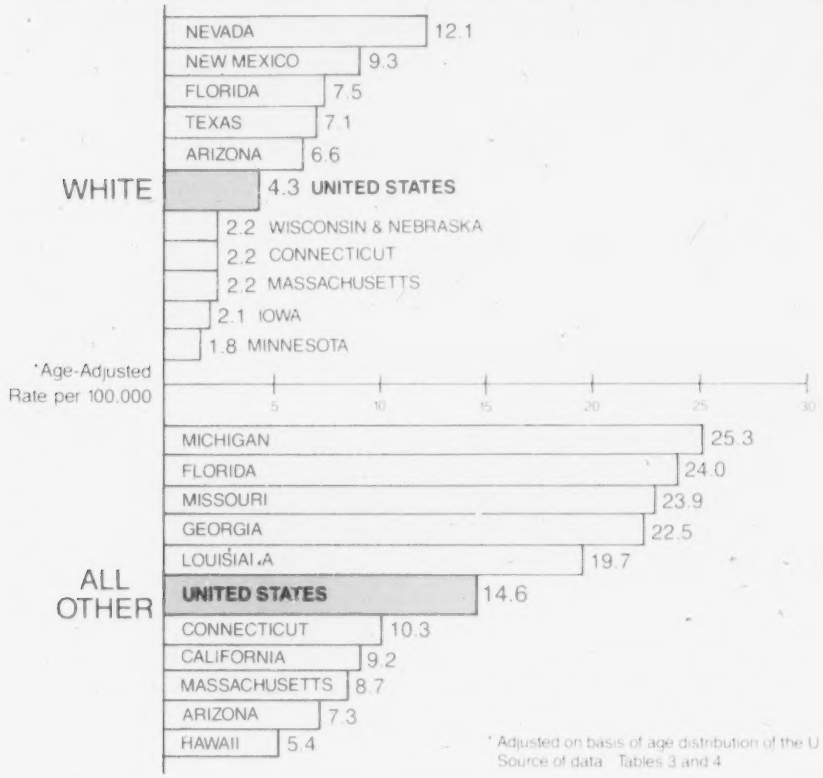
Among women aged 15-44 there were also notable geographic differences in homicide rates, although the range of the variations was not as wide as it was among men. As was the case among men, the age-adjusted death rates among women were lowest in the New England division of the country and highest in the West South Central states. Similarly, the highest age-adjusted mortality rate for women was recorded in the

A comparison of the geographic mortality differences by race for both men and women reveals substantial disparities.



* Adjusted on basis of age distribution of the U.S. total population, 1940.
Source of data: Tables 3 and 4.

Figure B — States With Highest and Lowest Mortality From Homicide Among Women Aged 15–44, by Race, United States, 1979–81



* Adjusted on basis of age distribution of the U.S. total population, 1940.
Source of data: Tables 3 and 4

District of Columbia. In Nevada the death rate was almost as large, while in three other states—namely, Alaska, Florida and Georgia—death rates above 10.0 per 100,000 were recorded. Compared with the United States average mortality rate of 6.2 per 100,000, the age-adjusted death rate was lowest in Minnesota (2.1 per 100,000). In four other states the mortality rates were less than 3.0 per 100,000.

A comparison of the geographic mortality differences by race for both men and women reveals substantial disparities. For example, in the area of the country with the lowest homicide rate (New England), the age-adjusted mortality rate for white men was 7.4 per 100,000, while that for men of all other races was 40.8 per 100,000—over 5 times as large. Even more dramatic was the rate discrepancy in the West North Central states. Men residing in this area of the country recorded the second lowest mortality rate from homicide, but the death rate for nonwhites was more than 16½ times the rate for whites—119.5 per 100,000 versus 7.2 per 100,000, respectively. It is interesting to note that in the Pacific and Mountain divisions of the country the mortality rate differences between whites and nonwhites were comparatively small—a ratio of less than 2 to 1. The mortality pattern by race among women was essentially similar to that of men. Figures A and B present the states with the highest and lowest age-adjusted mortality rates from homicide and legal intervention by race and sex.

A Timeless Social Problem

Homicide is primarily a social problem. As a cause of death, it becomes part of public health's responsibility to collect the data of vital statistics, but the effective control of homicide is simply too complex for any single social agency to manage. The main causes have been attributed to environmental, societal, physical and psychological reasons, and the interrelations between these factors usually produce the end result. The history of homicide dates back to the earliest recording of human events, and some of the first efforts to deal with the tragedy still dominate current thinking. The code of Hammurabi, in which the underlying principle is "an eye for an eye, a tooth for a tooth," is the foundation of many existing laws that attempt to control the problem. Throughout history this basic principle was seen as extremely limited and through the efforts of many researchers modifications evolved.

A recent study of international homicide did away with many of the commonly held, preconceived notions as to why killings occur. Archer and Gartner, for instance, found that the death penalty does not deter murderers, that crowding does not necessarily cause violence, that violence does increase in a nation that has just been involved in a war, and that within the same nation large cities do have higher homicide rates than small cities. The researchers came to the conclusion that only international studies can provide answers to the many perplexing questions about the origins of human violence.

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Capsule Briefs

are timely literature selections with broad reader interest

Focus on Children

Will AIDS Become an Adolescent Disease?

With the world focused so extensively on adults and infants, sexually active 13-19-year-olds may have been forgotten in the "Age of AIDS." Sexual activity by age 19 among urban teenagers (e.g., 60 percent among white girls, 80 percent among black girls) presents a high-risk situation. Most teens do not use condoms. (Hein, K., **New York State Journal of Medicine**, 1987, 87(5):290-295.) As someone recently said, "Teenage sexual activity in the Age of AIDS is like watching an accident about to happen." • • • There were 307 children under 13 years (end of 1985) who were AIDS victims. Most (80 percent) acquired it perinatally, and almost all others through treatment with blood products. (Rogers, M.F., *et al*, **Pediatrics**, 1987, 79(6):1008-1014.) Sadly, the number of childhood cases is increasing rapidly. In 1987 over 70 percent have been in black and Hispanic babies. As a result, in the perinatal period black babies statistically have the same chance of having AIDS as an adult white male, according to the Centers for Disease Control, Atlanta. • • • What is it that teenagers *know, believe, think*, and *do about AIDS*? Though in this survey 70 percent of teens reported they were sexually active, only a tiny fraction had changed their behavior *and* adopted effective preventive measures. Their lack of knowledge about transmission of AIDS seemed their greatest source of vulnerability. (Strunin, L. and Hingson, R., **Pediatrics**, 1987, 79(5):825-828.) • • • Stepping in to fill that knowledge gap is an excellent and innovative pamphlet called **Teens and AIDS: Playing It Safe**. It was developed jointly by the American Council of Life Insurance and the Health Insurance Association of America in 1987 with diverse consultation nationally. Write to Education Relations and Resources at either organization for a copy.

Expert Medical Committees Make Recommendations About Child Health

Several recent committee reports from the American Academy of Pediatrics have considerable significance for public health in nearly all communities. These reports were expert committee advisories to pediatricians about critical community health issues. Community leaders may not always be aware that pediatricians often represent an important resource for advice on public health problems of childhood. For additional information on what experts tell pediatricians about such issues, you may want to read the original reports (published in **Pediatrics**, Vol. 79, 1987): *Asbestos Exposure in Schools* (pp. 301-305); *Tobacco Use by Children and Adolescents* (pp. 479-481); *Qualification and Utilization of Nursing Personnel Delivering Health Services in Schools* (pp. 647-648); *Role of the Pediatrician in Management of Sexually Transmitted Diseases in Children and Adolescents* (pp. 454-456); *Alcohol Use and Abuse: a Pediatric Concern* (pp. 450-453).

Childhood Intelligence

We are learning gradually how competent infants are, as our measurements get more sophisticated. For instance, two child developmental psychologists have shown that tests of intelligence quotients (IQ) can be used in the first 6 months of life that correlate well with tests at ages 4-6 years. So, parents, you also should be alert. Much learning is occurring in that cooing, cuddly little infant. (Kolata, G., **Science**, 1987, 236:774-5.) • • • Though constitutional factors in IQ are well established, like Yogi Berra's baseball game, IQ may not be determined until childhood is over. That conclusion emerges from this study of social environmental risk factors on 215 four-year-olds in Rochester, N.Y. Those children from "high-risk" families ("risk" defined using mental health status, anxiety measures, interaction measures, life events and selected demographics) had statistically significantly lower IQs. (Sameroff, A.J., *et al.* **Pediatrics**, 1987, 79(3):343-350.) • • • Physical environmental factors also can depress IQ, as this study of blood lead levels in 855 Edinburgh, Scotland, boys and girls aged 6-9 years, demonstrated. A complex statistical analysis that controlled for the usual confounders in IQ measurement, determined that there was a "significant negative relationship between ... blood lead" and ability and educational attainment of these children. Does your community know the blood lead levels of its school children? (Fulton, M., *et al.* **The Lancet**, 1987, 1:1221-1226.) • • • When phenylketonuria (PKU) testing and dietary treatment from infancy became available about 25 years ago, it was a Godsend for parents of afflicted babies. Otherwise, they were condemned to lives of mental subnormalcy. This study was a report of a 22-year follow-up of 91 children from a cohort diagnosed, then treated as PKUs from infancy. Some had their diet discontinued after age five; others continued it longer. For some children with higher blood levels of phenylalanine (over 18 mg/dL), dietary continuation may yield higher mid-childhood IQ levels. (Waisbren, S.E., *et al.* **Pediatrics**, 1987, 79(3):351.) • • • Why don't girls usually perform as well as boys on math and science achievement tests? Some posit genetic factors that favor boys in these subjects. Others label the blame as psychosocial: so-called "math anxiety." Recent evidence seems to indicate that girls *can* and *are* doing better than before on math and science tests, but that they still haven't caught up with boys, especially at the highest performance levels. (Holden, C., **Science**, 1987, 236:660-661.)

Regional Variation in Costs of Cataract Surgeries

Cataracts, clouded or opaque lenses, are a major cause of blindness in the United States. The condition is progressive, varies in degree of visual impairment and frequently occurs in both eyes. Cataracts can be caused by a variety of conditions but are usually associated with aging, and most people over age 70 experience some degree of cataract formation. Fortunately, however, cataract surgery (extraction of the diseased lens) is one of the safest, most common and efficacious operations being performed today.

Over the past two decades, many advances in cataract management have taken place. Lens extraction has been facilitated by the introduction of the operating microscope, improved instruments and suture materials, the development of better techniques, and the growing acceptance of the implantation of refined, high quality intraocular lenses. As the technology has grown, so has the number of cataract extractions, particularly among the elderly. Cataract surgery is now the most common major surgical procedure covered by Medicare. Government experts estimate that more than 2 million cataract extractions will be performed in 1989.

With advances in surgical technology, increased demands for lens extractions among all ages, and a heightened awareness of and emphasis on medical/surgical cost containment programs, cataract surge are increasingly being performed on a patient basis. Through 1983 in hospi cataract extractions increased, consist ranking this procedure among the to surgeries in U.S. hospitals (Figure A). B 1983 and 1985, however, the number o hospital cataract operations decreas percent from 600,000 to 186,000. Now

than three-fourths of all Medicare catar operations are performed in clinics or do offices. Whether or not out-patient catar surgery is indeed resulting in reduced m expenses is a controversial subject and that continues to be investigated. Som evidence suggests that waste and abu surround out-patient procedures and tha cataract operations can cost more than t that for an in-hospital extraction. The o patient and hospital reimbursement syst is being investigated and various legisla reform measures are being proposed a implemented—all toward the goal that rehabilitation be performed in as equit a manner as possible.

The following study addresses the issu variation in costs for an in-hospital catar operation in the United States. It presents analysis of 213 cataract operations perfo on persons under 65 years of age in U.S. between March 1, 1985, and February 1986. The data are from claims made employees and dependents of compa insured under group health contracts

Metropolitan Life Insurance Company. The average charges represent billed amounts for hospital and physician (surgical and medical) fees for CPT-4* codes 66830, 66840, 66915, 66920-66940, 66983, 66984.

The study group included 103 men and 110 women, each averaging 57 years of age.

*CPT-4 — Physician's Current Procedural Terminology, Fourth Edition.

Presentation of claims charges is for these men and women, combined, and is restricted to those 12 states within the continental United States in which at least five in-hospital cataract procedures were performed. These data represent 75 percent of the reported cases. As seen in Table 1, the distribution of cataract surgeries varied considerably by region of the country. The Middle Atlantic states accounted for one-fourth of all the cataract

Figure A — Rates of In-Hospital Cataract Extractions by Sex, United States, 1980 to 1985

Source: Published and unpublished data from Vital and Health Statistics, National Center for Health Statistics, Hospital Discharge Surveys, 1980 through 1985.

Table 1 — Regional Distribution of In-Hospital Cataract Procedures* March 1, 1985 – February 28, 1986

Geographic Area	Number	Percent	Total Costs
United States	213	100.0	$5,410
New England	8	3.7	4,840
Connecticut	2	.9	4,630
Massachusetts	4	1.9	5,020
New Hampshire	1	.5	6,020
Vermont	1	.5	3,340
Middle Atlantic	53	24.9	6,200
New Jersey	6	2.8	4,870
New York	37	17.4	6,160
Pennsylvania	10	4.7	7,110
East North Central	48	22.5	5,320
Illinois	23	10.8	5,180
Indiana	4	1.9	5,900
Michigan	1	.5	2,720
Ohio	18	8.4	5,370
Wisconsin	2	.9	6,610
West North Central	17	8.0	4,590
Iowa	2	.9	3,860
Kansas	2	.9	5,140
Missouri	11	5.2	4,580
Nebraska	2	.9	4,820
South Atlantic	23	10.8	5,060
Florida	4	1.9	5,140
Georgia	3	1.4	4,370
Maryland	3	1.4	5,300
North Carolina	4	1.9	5,350
South Carolina	2	.9	4,270
Virginia	5	2.4	5,510
West Virginia	2	.9	4,680
East South Central	23	10.8	4,450
Alabama	2	.9	4,480
Kentucky	11	5.2	5,200
Mississippi	2	.9	3,170
Tennessee	8	3.8	3,750
West South Central	24	11.3	5,370
Arkansas	4	1.9	4,150
Louisiana	5	2.4	5,820
Texas	15	7.0	5,540
Mountain	7	3.3	5,290
Arizona	1	.5	7,290
Colorado	2	.9	5,480
New Mexico	3	1.4	3,610
Utah	1	.5	7,960
Pacific	10	4.7	6,740
California	10	4.7	6,740

* Surgeries performed on employees and dependents of group health customers of Metropolitan Life Insurance Company

procedures, followed closely by the East North Central area of the country. The Mountain area reported the fewest cataract operations with only 3 percent of the total, and states in the New England area accounted for 4 percent of the total hospital claims.

According to Metropolitan Life statisticians, the average total cost for an in-hospital cataract operation in the United States was $5,410 (Table 2). The lowest total costs were recorded in the East South Central area with charges 18 percent lower than the average for the country. Only two of the nine areas — the Pacific, i.e., California, and Middle Atlantic states — registered charges above the norm with total costs 25 and 15 percent higher, respectively.

As seen in Table 1, total charges for an in-hospital cataract operation differed by as much as 193 percent between individual states. The highest total charge (almost $8,000) was recorded for the one cataract removal performed in Utah; the lowest charge, $2,720, was reported in Michigan, also for one operation. As the number of procedures performed increases, this disparity diminishes, but a sizable difference remains, nonetheless. Thus, among states in which at least five cataracts were removed, a 90 percent difference existed between the charges in Pennsylvania ($7,110) and those in Tennessee ($3,750) (Figure B). The Pennsylvania total charge was 31 percent above the national average and the Tennessee charge was the identical percentage *below* the norm. The other states in which the average total charges exceeded the norm were California, New York, Louisiana, Virginia and Texas. It seems noteworthy that the charges should differ by 46 percent between states in the Middle Atlantic area of the country. The New Jersey charges were 10 percent below the average, whereas the New York costs were 14 percent above. Missouri was the only other state in which a cataract removal cost more than 10 percent below the average.

The average physician cost was $2,710 across the country, representing half of the total cataract surgery bill. The charges differed by as much as 148 percent between those registered in New York ($4,050) and those reported in Tennessee ($1,630). The New York physician charge comprised two-thirds of the total bill and was the highest proportionate charge among the states in the study. In addition, the doctors' charges in New York were almost 50 percent above the U.S. average. The physician charges in California and Pennsylvania were more than $3,000, 28 and 22 percent above the norm, respectively.

Physician charges were 20 percent or more above the U.S. average in California and Pennsylvania. These fees were in contrast to those reported in Virginia and Missouri, where the physician fees were 26 and 22 percent below the average.

On average, 50 percent of the total cost to health insurance for an in-hospital cataract removal was attributable to hospital charges (i.e., room and board and ancillary fees). By states these percentages ranged from highs of 64 percent in Virginia and 57 percent each in Tennessee and Texas to lows of 34 percent in New York and 42 percent in New Jersey.

Actual hospital charges varied by as much as 86 percent between states—again this difference existed within the Middle Atlantic states. The hospital charges registered in Pennsylvania were 41 percent above the U.S. average of $2,700, whereas the costs in

Table 2—Regional Variation in Average Charges for a Typical* In-Hospital Cataract Procedure† March 1, 1985–February 28, 1986

Geographic Area	Average Costs ($)					Average Length of Stay	Percentage	
	Total Hospital & Physician	Hospital Charge			Physician Charge		Hospital of Total	Ancillary of Hospital
		Total	Room & Board	Ancillary				
United States	5,410	2,700	550	2,150	2,710	2.43	50	80
New England	4,840	2,380	410	1,970	2,460	1.38	49	83
Middle Atlantic	6,200	2,420	540	1,880	3,780	2.06	39	78
New Jersey	4,870	2,040	220	1,820	2,830	1.33	42	89
New York	6,160	2,110	500	1,610	4,050	2.08	34	76
Pennsylvania	7,110	3,800	880	2,920	3,310	2.40	53	77
East North Central	5,320	2,900	660	2,240	2,420	2.63	55	77
Illinois	5,180	2,830	760	2,070	2,350	2.65	55	73
Ohio	5,370	2,830	460	2,370	2,540	2.28	53	84
West North Central	4,590	2,650	450	2,200	1,940	2.41	58	83
Missouri	4,580	2,460	440	2,020	2,120	2.45	54	82
South Atlantic	5,060	2,860	600	2,260	2,200	2.96	57	79
Virginia	5,510	3,510	970	2,540	2,000	5.00	64	72
East South Central	4,450	2,400	400	2,000	2,050	2.22	54	83
Kentucky	5,200	2,830	560	2,270	2,370	2.73	54	80
Tennessee	3,750	2,120	290	1,830	1,630	1.75	57	86
West South Central	5,370	2,910	500	2,410	2,460	3.04	54	83
Louisiana	5,820	2,890	370	2,520	2,930	2.00	50	87
Texas	5,540	3,160	590	2,570	2,380	3.67	57	81
Mountain	5,290	2,690	530	2,160	2,600	2.43	51	80
Pacific	6,740	3,260	680	2,580	3,480	2.20	48	79
California	6,740	3,260	680	2,580	3,480	2.20	48	79

* Typical surgeries exclude outliers according to DRG guidelines.

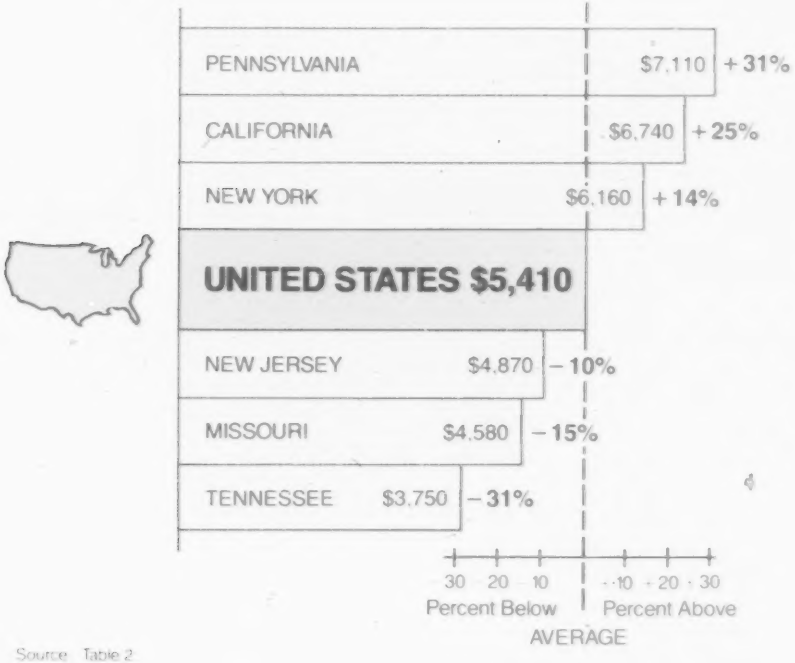
† Surgeries performed on employees and dependents of group health customers of Metropolitan Life Insurance Company.

Source: Claims data from Metropolitan Life Insurance Company merged and edited by Corporate Health Strategies, Inc., analysis and computations by Health and Safety Education personnel, Metropolitan Life Insurance Company.

New Jersey were 24 percent *below* the average. Hospital fees were 30 and 21 percent above average in Virginia and California, respectively. In contrast to these high fees, New York and Tennessee averaged hospital charges 22 d 21 percent *below*.

Ancillary charges (laboratory, X-rays, operating room charges, etc.) comprised 80 percent of the total hospital billings. Geographically, these charges typically ran three and one-half to five times the cost of room and board. However, in some states, the costs ranged from two and one-half to more than eight times greater than the room and board fees. By individual states, ancillary charges comprised 72 percent of the hospital bill in Virginia, yet these dollars constituted 89 percent of the total hospital bill in New Jersey. The highest ancillary charges, i.e., 20 percent greater than the U.S. average, were recorded in Pennsylvania, California and Texas. The lowest charge was found in New

Figure B — States With Highest and Lowest Total Charges for an In-Hospital Cataract Extraction March 1, 1985 – February 28, 1986



Source: Table 2

York ($1,610), 25 percent below the average and 45 percent lower than the Pennsylvania charge. Other states in which the fees were comparatively low (i.e., 15 percent below the average) were New Jersey and Tennessee.

The average length of stay was 2.43 days with modest variation evident between regions. Between state variation, however, was considerable, ranging from five days in Virginia to 1.33 days in New Jersey. As would be expected, the impact of the number of days of hospitalization is reflected in the room and board fees.

As described above, regional variation in charges for a cataract operation was fairly extensive for the cost categories examined. The reasons for these differences are not clear cut but are usually attributed to the experience, number and medical training of the opthalmologists in the area as well as cost of living difference and the socio economic and demographic makeup of the region. As the technology continues to improve and the population ages and is healthier, requests for restoration of sight will continue to increase. With more cataract extractions and lens implantations being performed on an out patient basis, monitoring the quality of, criterion for and charges associated with the procedures should become routine and less costly. Clearly action must be taken to correct any inequities that have surfaced between charges for in-patient and ambulatory cataract operations. Increased surveillance of the charges associated with this procedure in both settings is obviously in order. Only when such data are made available in a routine fashion can be the public make informed choices as to how best to use their health care resources.

Canada's Changing Population

The population of Canada was 25,354,064 on June 1, 1986, according to recently released figures by Statistics Canada. This represents an increase of 1,010,883 or 4.2 percent since the last official count five years earlier. However, the percentage change during the 1981-1986 period was the lowest five-year growth rate in the past 25 years. During this interval, the relative increase in the number of Canadians was as large as 9.7 percent (1961-66). By comparison, between 1976 and 1981 the

Table 1 — Canadian Population by Province 1976 to 1986, with Projection to 2001 (as of June 1)

	Census Count			Percent Change		Projection
Province	1976	1981	1986	1976-81	1981-86	2001
Canada	22,992,605	24,343,181	25,354,064	5.9	4.2	**27,816,000**
Newfoundland	557,725	567,681	568,349	1.8	.1	**609,000**
Prince Edward Island	118,230	122,506	126,646	3.6	3.4	**126,000**
Nova Scotia	828,570	847,442	873,199	2.3	3.0	**887,000**
New Brunswick	677,250	696,403	710,422	2.8	2.0	**730,000**
Quebec	6,234,445	6,438,403	6,540,276	3.3	1.6	**6,741,000**
Ontario	8,264,465	8,625,107	9,113,515	4.4	5.7	**9,738,000**
Manitoba	1,021,505	1,026,241	1,071,232	.5	4.4	**1,097,000**
Saskatchewan	921,325	968,313	1,010,198	5.1	4.3	**1,120,000**
Alberta	1,838,035	2,237,724	2,375,278	21.7	6.1	**3,022,000**
British Columbia	2,466,610	2,744,467	2,889,207	11.3	5.3	**3,668,000**
Yukon and Northwest Territories	64,445	68,894	75,742	6.9	9.9	**77,000**

Note: The figures for 2001 have been independently rounded; hence, the sum of parts will not equal the total.
Source: Various reports by Statistics Canada.

population of Canada grew by 5.9 percent, or by 1,350,000. The continued slowdown in the rate of growth is attributed to lower immigration levels and declining birth rates. Moreover, although there may be some fluctuations, this trend is likely to continue. Table 1 presents projections by province for 2001, as well as the census results during the past decade.

Although each province gained population between 1981 and 1986, there were significant geographic variations in the rates of growth (see accompanying figure). The number of persons residing in Alberta rose by 6.1 percent — the largest relative increase of any province; nonetheless, this was a marked reduction from the percentage gain in the previous five-year period — 21.7 percent. Alberta's population of 2.3 million accounts for nearly 10 percent of all Canadians.

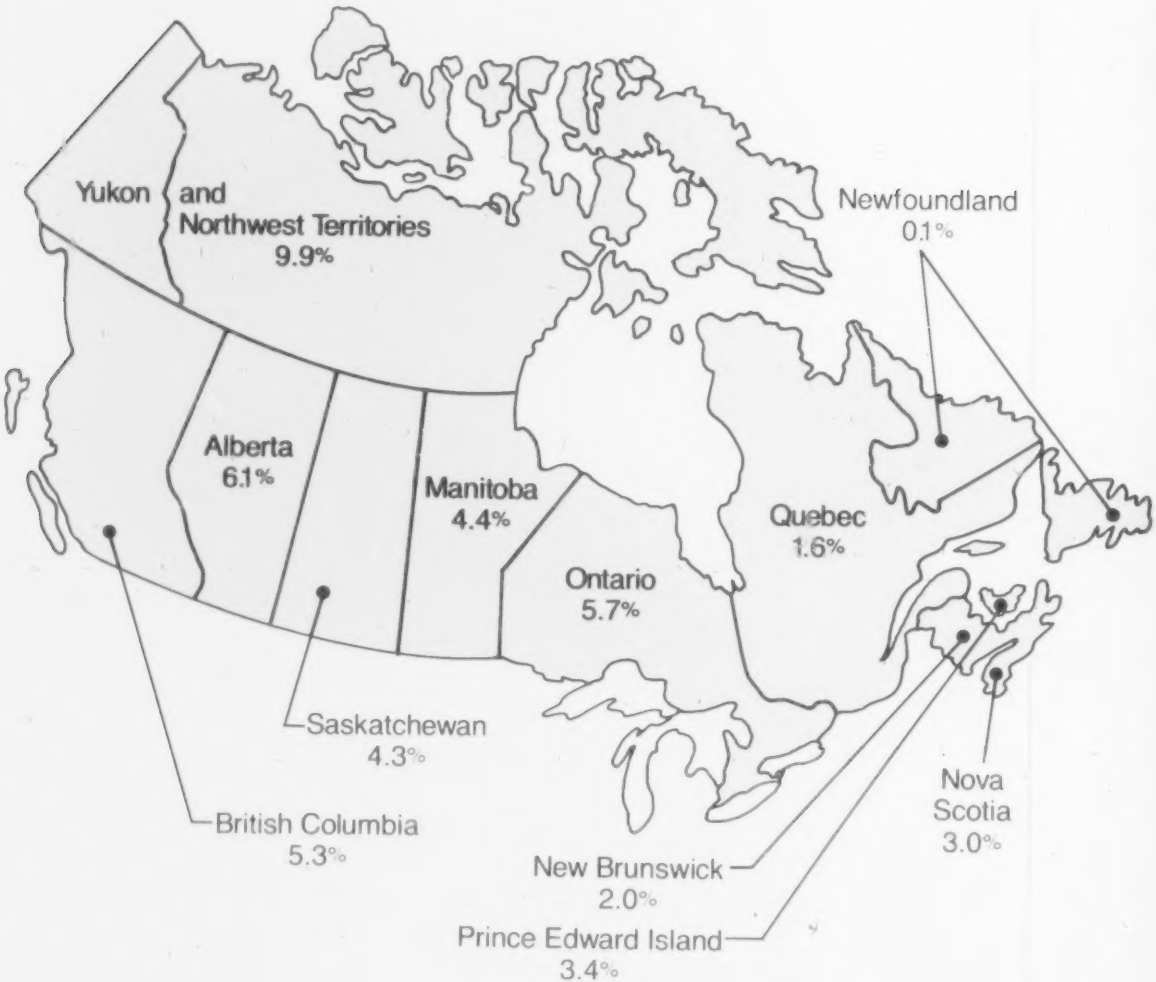
In Ontario, the most populous Canadian province — the increase between the two latest census figures was 5.7 percent, with the population exceeding 9.1 million in 1986. By comparison with the other provinces during this period, Ontario was the only area to have consistently gained inhabitants by net in-migration. The number of inhabitants in Ontario represent almost 36 percent of the population of Canada.

Numerically, Quebec is the second largest province in Canada, containing 26 percent of the nation's residents. Here, too, the growth rate has diminished considerably. In June 1986, there were more than 6.5 million people living in Quebec — an increase in the past five years of just 1.6 percent, or half the relative rise that occurred in the previous five-year period.

In British Columbia, the population gain between 1981 and 1986 was 5.3 percent and it represented the third largest relative provincial increase. Currently, over 11 percent of Canada's inhabitants reside within its boundaries. But, once again, the recent percentage gain was a sharp reduction from the earlier increase. On the other hand, in Manitoba, the population increase between the 1981 and 1986 censuses was 4.4 percent — up sharply from the relative change between 1976 and 1981.

The age distribution of Canada's population varies considerably by province. According to estimates for June 1986 (census results by age are not yet available), there were 6.6 million persons under age 18 in Canada — 26 percent of the total population. Young persons comprised 32 percent of Newfoundland's residents, whereas Quebec's and British Columbia's proportion amounted to just 25 percent of the total. There were 11.4 million

Figure — Percentage Change in Population, by Province, Canada, 1981 – 86



Canadians aged 18-44, yet only 41 percent of Saskatchewan's population was at these ages, while in Alberta the relative number was 47 percent.

Because Alberta contained a relatively large number of younger persons, it is not surprising that it has the smallest proportion of persons aged 65 and over—in June 1986, a mere 8.1 percent of its population. A similar situation occurred in Newfoundland; as a result, only 8.7 percent of its population was aged 65 or older. Around 12.5 percent of the population of Manitoba, Prince Edward Island and Saskatchewan was 65 years of age or over. Nationally, senior citizens made up 10.6 percent of Canada's population.

Table 2—Population Estimates by Age and Sex Ratio Canada, by Province, June 1, 1986

Province	Percent Distribution by Age					Men per 100 Women			
	Under 18	18 – 44	45 – 64	65 and Over	All Ages	Under 18	18 – 44	45 – 64	65 and Over
Canada	25.8	44.4	19.2	10.6	**98**	105	101	97	73
Newfoundland	31.8	44.0	15.5	8.7	**101**	106	99	103	85
Prince Edward Island	28.7	41.8	17.0	12.5	**99**	106	102	98	78
Nova Scotia	26.4	43.9	18.0	11.7	**98**	105	101	96	74
New Brunswick	27.9	43.8	17.4	10.9	**98**	105	101	96	76
Quebec	24.7	45.7	19.7	9.9	**97**	106	101	94	68
Ontario	25.0	43.8	20.2	11.0	**97**	105	99	97	71
Manitoba	26.8	42.3	18.3	12.6	**97**	105	101	95	75
Saskatchewan	29.1	40.8	17.6	12.5	**100**	105	103	99	82
Alberta	28.2	47.3	16.4	8.1	**103**	105	106	102	79
British Columbia	24.9	43.2	19.7	12.2	**98**	105	100	100	76
Yukon and Northwest Territories	36.5	48.5	12.3	2.7	**109**	105	109	128	100

Source: Statistics Canada, Postcensal Annual Estimates of Population by Marital Status, Age, Sex and Components of Growth for Canada, Provinces and Territories, June 1, 1986, Catalogue 91 – 210, March 1987.

This was the fastest growing segment of the population, with the number of such persons increasing from 2.4 million to 2.7 million, or by 15 percent.

Nearly one fifth of Canada's population was aged 45–64. The proportion of the population at these ages was slightly above the national average in Ontario, Quebec and British Columbia, but was notably below in Newfoundland and Alberta. The percentage distribution of the population of Canada by province is provided in Table 2.

Variations by Sex Distribution

In June 1986 there were slightly more women than men in Canada. The right hand side of Table 2 shows the sex ratio by broad age groups for the large geographic divisions of the country. For all of Canada, as can be seen, there were 98 men for every 100 women. Only Alberta and Newfoundland had more men than women. Analysis by age reveals that the sex ratio diminished with advance in age. At ages under 18 there were 105 men for every 100 women — a ratio that was virtually the same in every province. In the next age bracket — ages 18 to 44 — only Newfoundland and Ontario had fewer men than women. On the other hand, Alberta had 106 men for every 100 women. The sex ratios for the remaining provinces indicate that men just slightly outnumbered women. By ages 45 to 64 Canada had more women than men. Nationally, the ratio was 97 men for every 100 women. Also of note was the increasing disparities in the sex ratios by province. In contrast to the countrywide picture, Newfoundland and Alberta had more men than women, while there were about equal numbers of each sex in British Columbia. Quebec had the fewest number of men relative to the number of women — the ratio was only 94 per 100. In addition, Quebec also had the lowest ratio of men to women at ages 65 and over — namely 68 per 100. In Newfoundland and Saskatchewan, the ratio was 85 per 100 and 82 per 100, respectively. Nationally, the sex ratio was 73 men per 100 women.

In comparison with the increase for the entire country, Canada's large metropolitan areas experienced rapid population growth

Table 3—Population Change in Census Metropolitan Areas, Canada, 1976 to 1986 (as of June 1)

	Numbers in Thousands, as of June 1				Percent Change	
	Old Basis*		New Basis†			
	1976	1981	1981	1986	1976 – 81	1981 – 86
Total: 25 CMAs	—	—	14,313	15,154	NA	5.9
Newfoundland						
St. John's	145	155	155	162	6.5	4.6
Nova Scotia						
Halifax	268	278	278	296	3.6	6.6
New Brunswick						
Saint John	113	114	121	121	1.0	.2
Quebec						
Chicoutimi-Jonquiere	129	135	158	158	5.1	.2
Montreal	2,803	2,828	2,862	2,921	.9	2.1
Quebec	542	576	584	603	6.3	3.3
Sherbrooke	NA	NA	125	130	NA	3.8
Trois-Rivieres	106	111	125	129	5.1	2.8
Ontario						
Hamilton	529	542	542	557	2.4	2.8
Kitchener	272	288	288	311	5.8	8.1
London	270	284	327	342	4.9	4.7
Oshawa	135	154	186	204	14.1	9.2
Ottawa-Hull	693	718	744	819	3.6	10.1
St. Catharines-Niagara	302	304	343	343	.8	.2
Sudbury	157	150	156	149	4.5	4.6
Thunder Bay	119	121	122	122	1.8	.2
Toronto	2,803	2,999	3,130	3,427	7.0	9.5
Windsor	248	246	251	254	6	1.2
Manitoba						
Winnipeg	578	585	592	625	1.2	5.6
Saskatchewan						
Regina	151	164	173	187	8.7	7.7
Saskatoon	134	154	175	201	15.3	14.6
Alberta						
Calgary	471	593	626	671	25.7	7.2
Edmonton	556	657	741	785	18.1	6.0
British Columbia						
Vancouver	1,166	1,268	1,268	1,381	8.7	8.9
Victoria	218	233	241	256	7.0	5.8

* Based on 1981 area. † Based on 1986 area.
Note: Percentages are based on unrounded figures.
Source of basic data: Census reports from Statistics Canada.

between 1981 and 1986. As a group, the number of residents of the 25 large Census Metropolitan Areas (CMAs)* rose by 5.9 percent. The largest relative increase—14.6 percent—occurred in the Saskatoon area. Next in rank order was the gain in the Ottawa-Hull CMA (10.1 percent), closely followed by the rise in the Toronto CMA (9.5 percent). Toronto is Canada's most populous CMA, with over 3.4 million residents in 1986. The population increase in the Montreal CMA—the second largest Canadian metropolitan area—was only 2.1 percent. In Vancouver, the only other CMA with more than one million residents, the growth rate between 1981 and 1986 was 8.9 percent. With the exception of the Oshawa and Kitchener CMAs (both in Ontario province), no other regional area experienced an 8 percent or higher percentage gain. By contrast, the Sudbury CMA (also in Ontario province) was the only major center to record a decline between the two censuses. In four other CMAs, the relative gain in the period under review was less than 1 percent. Table 3 shows the specifics of the population changes for the 25 CMAs between 1981 and 1986. For purposes of comparison with data for 1976, the middle two columns of the table show the CMA's population on June 1981 under the new (1986) and old (1981) boundary definitions.□

*A Census Metropolitan Area refers to the main labor market area of an urban area of at least 100,000 population.

SB
STATISTICAL BULLETIN

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50 YEARS AGO

IN THE 1937 STATISTICAL BULLETIN

More people were employed in U S industries in 1936 than at any time since the depression years of 1932 and 1933. Unfortunately, this improvement in economic conditions was accompanied by sizable increases in occupational mortality, paralleling the expansion of employment in the construction, manufacturing, mining and quarrying industries. Occupational fatalities numbering 18,000 were reported in the U S. population of 1936—a 9 percent increase over 1935. Among adult white men insured by Metropolitan Life, the 1936 fatality rate of 25.6 per 100,000 represented an increase of 16.9 percent over the 1935 rate. When occupational fatalities were broken down by type, only automobile accidents—exclusive of automobile collisions with railway trains, engines or street cars—registered a decline (7.5 percent) between 1935 and 1936. Increases in accidental mortality were registered from traumatism by falls, by machines and in mines and quarries, which, together with automobile accidents, were the four most frequent causes of fatal occupational injury. (Currently on the job, deaths number about 12,000 annually, resulting in a mortality rate of about 5.0 per 100,000 ed.) (Page 1, June)

A study of death rates by marital status based on the 1949-31 mortality experience, by sex and age, for residents of New York State, exclusive of New York City, confirmed evidence taken from Canadian statistics that married men consistently had a substantially more favorable mortality experience than unmarried men. In fact, the New York State study showed that from ages 30 to 45 the mortality of married men was less than half that of single men. Among women, the advantage of being married was less pronounced, with the death rate of married women at ages 30 to 65 only 10 percent better than that of single women. For wives aged 20-24, the hazards of childbirth raised the mortality of the married somewhat above that of the single. Although men generally have higher mortality than women, *married* men between ages 20 and 31 experienced lower mortality than married women of those ages because of the dangers of childbirth. When mortality among widowed and married people was compared, death rates among the widowed were higher at every age. Widowers had substantially higher mortality rates than widows. Metropolitan Life statisticians speculated about the future when pension plans would help relieve the widow of much of the stress resulting from loss of the family breadwinner. (Page 7, February)

Interpreting life insurance studies. Metropolitan Life statisticians concluded that body girth and length of life varied inversely with each other. They observed that by controlling overweight and thus reducing death from the major diseases of middle and later life, the average length of life would increase. An insurance study showed that obese men—35 percent or more above average weight—had mortality 1½ times that of average weight men. This held true despite the fact that this study group of policy holders included only overweight men selected by medical examination as free from any other serious impairment. The greater the degree of overweight, the greater was the mortality rate. The most favorable body weight based on mortality at the various adult ages was: up to age 30, slight overweight; ages 30 to 39, average weight; ages 40 to 49, slight underweight; ages 50 and over, an appreciable degree of underweight. Of the several body types of overweights the "pot bellied" variety was the worst, whereas the solidly built, large boned overweight individual was superior to the flabbier type. Certain serious physical defects were generally more common among overweights than those of slighter build. High blood pressure, for example, was 2½ times as common among overweights as among persons of average weight. Other hazards of overweight included most of the major diseases of adult life, especially the cardiovascular-renal diseases and diabetes. The tendency to overweight was attributed in part to less laborious activities—machinery taking the place of human labor—and to spectator sports. The statisticians cautioned against hazardous methods of weight reduction, some reducing diets and reducing drugs which could do more harm than good. (Page 2, May)

An analysis of the chances of eventually dying from accidents among the 1935 U S. population showed considerable variations by age and sex. For a white male, the likelihood of accidental death was 78 in 1,000 at birth, reached a maximum at age 5, then declined, reaching a minimum of 42 per 1,000 at age 70. The experience was very different for females. Their chances of accidental death were greatest at extreme old age. Analysis by type of accidental death, i.e., automobile, falls, burns, and drownings, revealed that a male from birth to age 55 years had a greater prospect of being killed in an auto accident than in any other type of accident. For females throughout life, the probability of dying from falls exceeded that of any other accidental injury. Even at birth this probability amounted to more than half the total likelihood of dying from all forms of accidents combined. When compared by sex, the chances of dying from falls were about twice as great for a girl as for a boy. Death by drowning was a predominantly male phenomenon, whereas death by burns was more common among women. (Page 6, November)

Coming in Future Issues

- Stomach Cancer: Mortality Variations by State
- Costs of Medical Care
- Mortality Differentials by Race and Sex
- Multiple Births